

Outcome-Based Arabic Language Education: Leveraging Learning Analytics for Graduate Success

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Abstract

This study evaluates an Arabic Language Education Program's Outcome-Based Education (OBE) implementation using a Goal-Free Evaluation Model (GFEM). The research objectives were to: (1) link Graduate Learning Outcomes (GLO) with Course Learning Outcomes (CLO) and assessments, (2) appraise Student-Centered Learning (SCL), authentic assessment, and facilities/IT support, and (3) synthesize educational outputs and graduate employability. The methodology employed a convergent, multi-source design triangulating curriculum records, satisfaction and employer surveys, tracer coverage, academic indicators, research/engagement portfolios, facilities/IT audits, and stakeholder interviews conducted from 2022 to 2024. The results demonstrate consistent implementation from planning to outcomes: GLOs cascade effectively to CLOs; SCL (problem, project, case-based) is routinely implemented; micro-teaching is institutionalized across the program. Key findings include GPA 3.73, time-to-degree 3.8 years, on-time graduation 52%, tracer coverage 92.86%, employability/entrepreneurship/further study 97.5%, and 4.8-month waiting time. The study concludes that identity-rooted OBE improvements with global responsiveness are achievable through systematic implementation, continuous monitoring, and cultural integration within educational frameworks.

Keywords: *outcome-based education, goal-free evaluation model, student-centered learning, AI-enhanced learning, tracer study, curriculum evaluation, employability*

Introduction

Arabic language education in Indonesia confronts a twin imperative: safeguarding Islamic values and local wisdom while adapting to an increasingly data-driven, digitized learning ecosystem. Despite persistent reliance on traditional pedagogy in many settings, contemporary graduate profiles are expected to combine disciplinary knowledge with pedagogical competence, digital fluency, and Arabic-linked entrepreneurial capability (Fazuhra & Samin, 2022; Samin & Hikmah, 2021; Samin & Osman, 2024; Yusri & Samin, 2024; Zurqoni et al., 2020). Against this backdrop, Arabic

teacher education benefits from a curriculum that purposefully interlaces Islamic identity, Malay cultural capital, and a global orientation.

Transformative Learning (TL) offers a conceptual lever to re-orient faculty and student practice toward reflective-critical, change-oriented learning (Mezirow, 1978, 1990, 2018). Contemporary TL underscores experience, emotion, and context in higher education (Halupa, 2015; Mälkki & Raami, 2022; Ramsden, 2003; Searle et al., 2021) and coheres with OBE's focus on measurable outcomes and purpose-built pedagogies (Biggs, 1999; Harden, 2007; Spady, 1994).

Pedagogically, active-learning designs—especially Problem-Based Learning (PBL)—yield gains in critical thinking, problem-solving, and collaboration when duration, assessment design, and facilitation are robust (Anwar & Hilmi, 2025; Conrady & Bogner, 2022; Samin & Hikmah, 2021; Yusri & Muhammad Samin, 2024). In Arabic teacher education, SCL via projects, cases, cooperative learning, and structured reflection helps bridge theory–practice (Ghani et al., 2011; Pebrian et al., 2022).

In parallel, Artificial Intelligence (AI) and web-based tools enable personalized feedback, targeted practice across listening, speaking, reading, and writing, and automated formative evaluation (Al-Shaboul et al., 2025; Samin & Osman, 2024; Yazid et al., 2024). Integration must remain adaptive, ethical, and context-sensitive so that Islamic and Malay values steer digital innovation.

From a quality-assurance standpoint, OBE combined with standardized assessment routines (CO-PO mapping, analytic rubrics, continuous improvement) undergirds accountable curriculum governance (Agrawal et al., 2021; Kumar, 2022; Joseph et al., 2024; Lugay et al., 2020; Mufanti et al., 2024; O'Sullivan et al., 2025; Yadav et al., 2024). Even so, recent syntheses flag familiar gaps: persistence of traditionalism, fragmented SCL, limited AI integration, and uneven assessment practice (Anwar & Hilmi, 2025; Handrianto et al., 2025; Yasmin & Yasmeen, 2021; Yazid et al., 2024; Zurqoni et al., 2020).

Problem statement and gap. Despite the maturation of OBE research and tooling (Joseph et al., 2024; Mufanti et al., 2024) and growing TL-informed pedagogy, many programs continue to report fragmented SCL roll-outs, uneven CO-PO assessment practice, and limited analytics capacity; in Indonesia, national survey evidence also indicates uneven OBE understanding and institutional support (Mufanti et al., 2024). For Arabic language teacher education specifically, prior studies seldom consolidate identity-rooted curriculum design, analytics-enabled governance, and AI-supported learning within a single evaluative framework.

Contribution and novelty. We propose a data-driven operationalization of OBE that (1) aligns GLO→CLO→assessment with constructive alignment principles (Biggs, 1999; Spady, 1994), (2) employs dashboards and learning analytics to close governance gaps, and (3) integrates TL-oriented reflective practices and AI-supported tools appropriate to Arabic learning (Yazid et al., 2024). This combination offers a consolidated, evidence-oriented pathway for Arabic language education programs in

Indonesia to improve both educational quality and graduate relevance while remaining faithful to Islamic-Malay values.

Beyond these established strands, recent bibliometric evidence depicts OBE research as increasingly data-centric and collaborative (Joseph et al., 2024), while national surveys highlight uneven OBE understanding and institutional support in Indonesia (Mufanti et al., 2024). In TL scholarship, assessment practices that surface disorienting dilemmas and reflective action are emphasized (Searle et al., 2021) and affect-cognition integration via edge-emotions is proposed to enrich transformative processes (Mälkki & Raami, 2022). For Arabic learning, emerging studies suggest AI-supported, web-based tools can enhance autonomy and targeted practice but require governance for accuracy, ethics, and equity (Al-Shaboul et al., 2025; Samin & Osman, 2024; Yazid et al., 2024). Recent research on Arabic language environments and self-regulated learning strategies demonstrates the importance of contextual adaptation in digital learning contexts (Samin, 2019; Samin et al., 2022, 2023). These convergences motivate a data-driven, identity-rooted approach that operationalizes OBE through dashboards and learning analytics while remaining attentive to TL-informed reflection and local values.

Addressing these gaps, this study analyzes an OBE-operationalized curriculum with SCL (PBL, project-, and case-based learning), integration of research/community engagement into coursework, structured micro-teaching, and IT/AI orchestration. The objective is to: (1) map curriculum design and implementation rooted in an Islamic-Malay-global identity; (2) evaluate teaching, authentic assessment, and facilities/IT support; and (3) assess educational outcomes and graduate relevance. Using the Goal-Free Evaluation Model (GFEM), we consolidate evidence on how curriculum innovation yields tangible impacts in the Indonesian context (Agrawal et al., 2021; Biggs, 1999; Lugay et al., 2020; Spady, 1994; Yadav et al., 2024). To align with the data-driven focus, OBE is positioned as a dashboard-oriented curriculum architecture with learning analytics linking GLO→CLO→assessment→outcomes. The Method details data sources, indicators, and procedures; the Result and Discussion present findings structured by planning–process–outcomes; and the Conclusion synthesizes implications and prioritized enhancements.

Analytics perspective. We frame learning analytics in four layers—descriptive (what is happening), diagnostic (why it happens), predictive (what may happen next), and prescriptive (what should be done)—and map each layer to OBE artifacts. Descriptive dashboards consolidate attainment trends (e.g., on-time graduation, tracer coverage); diagnostic analyses relate SCL design choices and micro-teaching cycles to variance in course-level attainment; predictive flags identify at-risk alignment nodes (GLO↔CLO↔assessment); and prescriptive insights guide targeted actions (rubric calibration, formative pacing, workload balancing). This layered view positions analytics as an academic quality instrument rather than surveillance, consistent with constructive alignment (Biggs, 1999) and continuous improvement logic (Agrawal et al., 2021; Kumar, 2022).

Assessment and TL alignment. Drawing on TL, we treat authentic assessment—micro-teaching, projects, case analyses—as occasions for reflective practice and feedback (Searle et al., 2021). These evidentiary tasks ground outcome dashboards; reciprocally, dashboards inform re-design of tasks and rubrics, linking TL's reflective core with OBE's measurable outcomes (Harden, 2007; Spady, 1994). In Arabic language teacher education, this coupling is crucial to integrate linguistic proficiency development with pedagogical competence, thereby addressing gaps noted in prior program evaluations (Zurqoni et al., 2020).

Arabic-AI ecosystem. Reports on AI-assisted Arabic learning point to gains in personalization and targeted practice across listening, speaking, reading, and writing (Al-Shaboul et al., 2025; Yazid et al., 2024), but also caution on accuracy, bias, and access. We therefore adopt an augmentation stance: AI supports (not replaces) SCL; instructors mediate outputs; and assignments require critical verification. This preserves Islamic-Malay values while scaling feedback and practice opportunities, aligning with identity-rooted yet globally responsive curriculum goals (Samin & Osman, 2024).

Anticipated contributions. By consolidating dashboard-enabled OBE, TL-informed assessment, and careful AI integration, this study offers (1) a replicable governance routine at program level; (2) a concrete mapping from GLO→CLO→assessment→outcomes with standard rubrics; and (3) a synthesis demonstrating how identity-rooted education can remain globally competitive. This package is transferable to other Arabic language programs and adaptable across disciplines where OBE maturity varies (Joseph et al., 2024; Yadav et al., 2024).

Cross-disciplinary relevance. Evidence that OBE frameworks scale across domains—medicine (O'Sullivan et al., 2025), engineering (Lugay et al., 2020; Yadav et al., 2024), and education (Joseph et al., 2024)—supports the transferability of our approach to Arabic language teacher education. In language contexts, viability studies report gains when OBE is adapted with coherent CLO articulation and assessment alignment (Yasmin & Yasmeen, 2021), suggesting that constructive alignment can mediate disciplinary differences when rubrics and feedback cycles are explicit.

Local adaptation. Indonesian studies underline context factors—leadership commitment, QA routines, resource provisioning—that condition OBE success (Mufanti et al., 2024). We therefore treat dashboards not only as technical tools but as governance artifacts that coordinate annual internal audits and Management Review Meetings, establish shared rubrics, and synchronize improvement targets with budget planning. This orientation aims to reduce fragmentation flagged by Zurqoni et al. (2020) and align program-level practice with national qualification standards (INQF).

Method

Researchers used the Goal-Free Evaluation Model (GFEM) to appraise OBE-driven curricular innovations without tying the analysis to pre-stated objectives. The approach emphasizes both intended outcomes and emergent effects of OBE implementation that integrates Islamic values, Malay culture, and a global outlook.

The unit of analysis is the Arabic Language Education Program (2022–2025), covering curriculum planning, instructional delivery, supporting facilities, and outputs in education, research, and community engagement. Key informants include faculty leadership, academic staff, administrative staff, students, alumni, and employers.

Quantitative and qualitative data were triangulated from: (1) OBE documents (GLO, CLO, course syllabi (CS), research/community-engagement (CE) roadmaps, internal audit reports (internal audits/AMI and Management Review Meeting/Rapat Tinjauan Manajemen or RTM), budget/expenditure documents (budget plans and realization reports); (2) academic databases (GPA, time to degree, on-time graduation), graduate tracer data (coverage, waiting time, post-graduation activities), student and employer satisfaction surveys; (3) research records (161 publications; mean 10.44 citations/article), community-engagement (CE) portfolios (37 programs); (4) facilities (micro-teaching and language laboratories, campus Information Technology/IT); (5) limited interviews and focus group discussions (FGDs) with stakeholders on curriculum and SCL implementation.

Researchers (a) mapped the OBE logic (GLO→CLO→sub-outcomes→assessment); (b) audited documents across six domains (curriculum, instruction, assessment, human resources, facilities/IT, outputs); (c) extracted indicators for education (GPA, time to degree, on-time graduation, satisfaction, employability), research (volume/quality, citations), and community engagement (volume, funding, student involvement); (d) cross-validated via syllabi, rubrics, LMS traces, monitoring reports, tracer data; and (e) synthesized themes to identify strengths, gaps, and impacts.

Numerical data were analyzed descriptively (means, proportions, trends), while qualitative data were thematically analyzed to extract SCL patterns (PBL, project- and case-based learning), research/community integration into teaching, and IT orchestration. Quantitative and qualitative strands were integrated (convergent design) to construct a coherent account of performance and improvement needs. Aggregated indicators were mapped to OBE dashboards to underpin the result and discussion, then interpreted critically in the conclusion.

Result and Discussion

This section presents comprehensive findings from the Goal-Free Evaluation Model (GFEM) analysis of OBE implementation in the Arabic Language Education Program. The results are organized systematically across planning, process, and outcomes dimensions, providing evidence-based insights into the effectiveness of curriculum innovations. The discussion integrates theoretical perspectives with empirical findings to elucidate mechanisms of impact and implications for Arabic language education.

To maintain coherence with the study aims and methods, researchers present results organized by planning, process, and outcomes (Tables 1–7), followed by detailed interpretations in relation to prior work and the stated objectives. Researchers situate the interpretations within the broader context of OBE research and Arabic language

education to elucidate what the findings confirm, extend, or challenge in the existing literature.

The findings demonstrate that the OBE-operationalized curriculum shows effective enactment across planning, process, and outcomes, aligning with the study aims (1)–(3). Drawing on OBE dashboard indicators and learning analytics, researchers observe consistent implementation of curriculum innovations across all dimensions. The evidence suggests that the integration of Islamic values, Malay culture, and global perspectives within OBE frameworks creates a robust foundation for educational excellence while maintaining cultural authenticity.

Planning. The OBE-aligned curriculum (integrated with the Indonesian National Qualifications Framework) is refined via annual micro-reviews and 4–5-year macro-reviews with internal and external stakeholders. Thirty-three GLOs are cascaded to CLOs and sub-outcomes across syllabi, with SMART indicators and assessment mapping. Program identity (Islamic values, Malay culture, global outlook) is embedded in graduate profiles, core knowledge areas, signature courses, and flexible experiential opportunities (student exchange, Arabic entrepreneurship, school-based practicums, thematic community programs).

Process. Faculty implement SCL (PBL, project-based, case-based, and collaborative learning), integrate research/community outputs into ≥ 30 courses, leverage IT/LMS (Google Classroom, cerdas.uir.ac.id), and run systematic micro-teaching that develops ≥ 10 core teaching skills. Formative and summative assessments employ holistic/analytic rubrics and portfolios across cognitive, affective, and psychomotor domains.

Outcomes. Educational performance shows a mean GPA of 3.73, average time to degree of 3.8 years, and on-time graduation of 52%. Student satisfaction is consistently high ($>75\%$) across reliability, responsiveness, assurance, empathy, and tangibles. The tracer tracks 92.86% of graduates; 97.5% are employed/self-employed/in further study with a 4.8-month waiting time; employer satisfaction is very high, especially for core competencies and collaboration.

Ecosystem. The faculty-student ratio is 1:17.9; 50% of faculty hold doctorates and 30% are full professors; 66 recognitions of expertise are recorded. Facilities include micro-teaching and language labs, a thematic library, and IT infrastructure (78 systems, 2 Gbps bandwidth, 403 access points). Research outputs total 161 publications (11 reputable international journals; 93 accredited national journals) with a mean 10.44 citations/article. Community engagement covers 37 programs in three years, with 100% student involvement in research and engagement activities.

Table 1.
Educational performance indicators

Indicator	Value
Mean GPA	3.73
Average time to degree	3.8 years
On-time graduation	52%

Indicator	Value
Student satisfaction	>75% (all dimensions)

Note. Source: Program dashboards compiled from student satisfaction surveys across reliability, responsiveness, assurance, empathy, and tangibles; Self-Evaluation Report/Quality Assurance (SER/QA) 2022–2025. In Table 1, the mean GPA of 3.73 and on-time graduation of 52% indicate solid attainment with headroom for improvement in completion velocity. Consistently high satisfaction (>75%) across five service dimensions supports the effectiveness of SCL and authentic assessment routines. Together, these signals suggest that constructive alignment is functioning at the program level, while quantification of course-level targets can sharpen progress on timeliness.

Table 2.

Tracer study and employability	
Indicator	Value
Tracer coverage	92.86%
Employability	97.5%
Job waiting time	4.8 months
Employer satisfaction	Very high

Note. Source: Tracer unit and Career Center records (coverage and outcomes 2022–2025); employer satisfaction surveys. As summarized in Table 2, tracer coverage of 92.86% strengthens confidence in the employability estimate of 97.5% with a 4.8-month waiting time. Very high employer satisfaction corroborates relevance of competencies, particularly collaboration and classroom-readiness. These outcomes align the curriculum with workforce expectations and provide a dependable baseline for longitudinal monitoring.

Table 3.

Supporting ecosystem (HR, facilities, IT)

Component	Value/Status
Faculty-student ratio	1:17.9
Faculty with doctorate	50%
Full professors	30%
Recognitions of expertise	66
Micro-teaching laboratory	Available
Language laboratory	Available
IT systems/infrastructure	78 systems; 2 Gbps; 403 AP

Note. Source: Institutional IT inventory and facilities audit (SER/QA 2022–2025); human-resources registry for qualification and recognition counts. Table 3 shows enabling conditions: a 1:17.9 faculty–student ratio, 50% doctoral qualification, and robust labs/IT backbone. These inputs are consistent with prerequisites for SCL at scale and timely feedback cycles. The configuration also supports analytics orchestration across courses and semesters.

Table 4.

Research and community-engagement performance

Indicator	Value
Total publications	161
Reputable international journals	11
Accredited national journals	93
Mean citations/article	10.44
Community programs (3 years)	37
Student involvement	100% (research & CE)

Note. Source: Publication repository (161 outputs and citations), community-engagement portfolio (37 programs, 3 years), and program monitoring of student participation in research/CE. As indicated in Table 4, publication volume (161; mean 10.44 citations/article) and 37 community programs in three years reflect an active scholarship and outreach ecosystem. Universal student involvement in research/CE strengthens learning relevance and deepens the pipeline for SCL artifacts and authentic assessment. These outputs reinforce the integration of research and community engagement into coursework noted earlier. These findings underpin the subsequent interpretations and improvement agenda (see Tables 1–7) and contrast with prior reports that noted fragmented SCL implementation and weak analytics integration. In brief, the evidence pattern supports objectives (1)–(3) stated at the end of the Introduction.

Table 5.

Alignment and assessment coverage (GLO–CLO–evidence)

Aspect	Value/Status
Graduate Learning Outcomes (GLO) defined	33 outcomes
CLO mapping embedded in syllabi/CS	Implemented
Direct measurement coverage (signature courses)	≥25% of courses (direct GLO)
Courses integrating research/CE	>30 courses
Monitoring of GLO (QA)	Routine Monev and audit

Note. Source: SER/QA 2022–2025: GLO count and CS mapping; direct GLO measures ≥25% of signature courses; integration of research/CE into >30 courses; QA monitoring and audits of GLO. The alignment infrastructure is in place: 33 GLO are articulated and mapped to CLOs within CS; at least a quarter of signature courses provide direct evidence for GLO; and research/community-engagement integration spans more than 30 courses. Routine monitoring by QA supports longitudinal dashboarding of outcome evidence and targeted follow-ups.

Table 6.

SCL and assessment operations

Component	Value/Status
SCL methods	PBL, project-based, case-based, collaborative
Micro-teaching practice	≥4 sessions per student per semester

Component	Value/Status
Teaching skills practiced	≥10 core skills
Feedback cycles	4 feedback opportunities per student
Student reflections	4 structured reflections per student
Rubrics	Holistic, analytic, and perception-scale rubrics
Assessment domains	Cognitive, psychomotor, affective
Moderation/standardization	Team moderation/meetings for scoring consistency

Note. Source: SER/QA 2022–2025: adoption of SCL methods; micro-teaching frequency (≥ 4), ≥ 10 skills; feedback and reflection cycles ($4\times$); rubric types; assessment across three domains; moderation practices. Coverage and cadence indicators show that SCL is mainstreamed, and assessment practices are structured: iterative micro-teaching, rubricized tasks across domains, and routine feedback/reflection cycles enable reliable evidence accumulation for dashboards and continuous improvement.

Table 7.

QA and analytics routines

Routine/Asset	Value/Status
Internal Quality Audit (IQA)	Conducted regularly (annual/periodic)
Management Review Meeting (MRM)	Each semester with Corrective and Preventive Action (CAPA) Plan follow-up
Student satisfaction monitoring	>75% very good across dimensions (siquis.uir.ac.id)
Tracer study cadence and coverage	University platform; eval every 2 months; 92.86%
IT infrastructure	78 systems; 2 Gbps bandwidth; 403 access points
Internal Quality Assurance System (IQAS)	Setting, Implementation, Evaluation, Control, And Improvement (SIECI) implemented across domains

Note. Source: SER/QA 2022–2025: IQA/MRM routines and CAPA Plan; siquis.uir.ac.id satisfaction results; tracer platform cadence and 92.86% coverage; IT infrastructure; ethics approval; IQAS (SIECI). These governance routines institutionalize analytics and feedback loops (IQA→MRM→CAPA Plan), while siquis.uir.ac.id and tracer cycles feed the dashboards with reliable process and outcome indicators. IT capacity underpins data availability and accessibility for program-level decision-making.

Comprehensive Analysis of OBE Implementation Effectiveness

The systematic evaluation reveals multiple layers of OBE implementation effectiveness that warrant detailed analysis. The integration of Islamic values, Malay culture, and global perspectives within the OBE framework demonstrates remarkable success across all evaluation dimensions. This achievement is particularly significant given the complex challenges of balancing cultural authenticity with international educational standards.

Curriculum Design and Cultural Integration

The OBE-aligned curriculum demonstrates sophisticated integration of cultural values within educational frameworks. The embedding of Islamic values, Malay culture,

and global outlook in graduate profiles, core knowledge areas, and signature courses creates a unique educational identity that distinguishes this program from conventional OBE implementations. This cultural integration approach addresses the critical gap identified in prior research regarding the limited adaptation of OBE frameworks to culturally diverse educational contexts.

The cascading of 33 Graduate Learning Outcomes (GLOs) to Course Learning Outcomes (CLOs) and sub-outcomes across syllabi demonstrates systematic curriculum alignment. The implementation of SMART indicators and assessment mapping ensures measurable outcomes while maintaining flexibility for cultural adaptation. This approach provides a replicable model for other Arabic language education programs seeking to integrate cultural values within OBE frameworks.

Student-Centered Learning Implementation

The widespread adoption of Student-Centered Learning (SCL) methods, including Problem-Based Learning (PBL), project-based learning, case-based learning, and collaborative learning, represents a significant departure from traditional teacher-centered approaches. The integration of research and community engagement outputs into more than 30 courses demonstrates the program's commitment to authentic learning experiences that bridge theory and practice.

The systematic micro-teaching implementation, developing more than 10 core teaching skills through structured practice sessions, provides students with essential pedagogical competencies. The implementation of holistic and analytic rubrics across cognitive, affective, and psychomotor domains ensures comprehensive assessment that captures the multifaceted nature of Arabic language education.

Technology Integration and Digital Innovation

The integration of Information Technology and Learning Management Systems (Google Classroom, cerdas.uir.ac.id) demonstrates the program's commitment to digital innovation while maintaining cultural sensitivity. The IT infrastructure, comprising 78 systems, 2 Gbps bandwidth, and 403 access points, provides robust support for technology-enhanced learning experiences.

The careful integration of Artificial Intelligence (AI) tools within Arabic language learning contexts demonstrates an augmentation approach that preserves Islamic-Malay values while scaling feedback and practice opportunities. This approach addresses concerns about accuracy, bias, and access while maintaining the integrity of cultural values within digital learning environments.

Graduate Outcomes and Employability

The exceptional graduate outcomes, including 97.5% employability/entrepreneurship/further study rate and 4.8-month average job waiting time, demonstrate the practical effectiveness of OBE implementation in producing workforce-ready graduates. The 92.86% tracer coverage provides confidence in the

reliability of these outcomes, while very high employer satisfaction corroborates the relevance of competencies developed through the program.

The mean GPA of 3.73 and average time to degree of 3.8 years indicate solid academic performance with room for improvement in completion velocity. The 52% on-time graduation rate, while below ideal targets, reflects the program's commitment to maintaining academic standards while supporting student success through comprehensive support systems.

Research and Community Engagement Excellence

The research productivity, totaling 161 publications with a mean of 10.44 citations per article, demonstrates the program's commitment to scholarly excellence. The distribution of publications across reputable international journals (11), accredited national journals (93), and other national publications (57) reflects balanced research output that contributes to both global and local knowledge bases.

The community engagement portfolio, covering 37 programs over three years with 100% student involvement, demonstrates the program's commitment to societal impact. This integration of research and community engagement into coursework strengthens academic culture and knowledge transfer while providing students with authentic learning experiences.

Quality Assurance and Continuous Improvement

The comprehensive quality assurance system, including Internal Quality Audits (IQA), Management Review Meetings (MRM), and Corrective and Preventive Action (CAPA) Plans, demonstrates systematic commitment to continuous improvement. The implementation of the Setting, Implementation, Evaluation, Control, and Improvement (SIECI) cycle across all domains ensures systematic quality enhancement.

The student satisfaction monitoring through squis.uir.ac.id, consistently exceeding 75% across all dimensions, provides evidence of program effectiveness from the student perspective. The tracer study cadence, evaluated every two months with 92.86% coverage, ensures reliable monitoring of graduate outcomes and program impact.

Alignment with prior evidence. The widespread adoption of SCL (PBL, project-, case-based) and resulting gains in student satisfaction and graduate readiness are consistent with meta-analytic evidence that active learning enhances critical thinking when duration and assessment are adequate (Niu et al., 2013). The constructive alignment between GLO–CLO–assessment observed here resonates with OBE theory (Spady, 1994) and design principles (Biggs, 1999), while the use of programmatic rubrics and dashboards parallels automation/standardization initiatives reported by Lugay et al. (2020) and metric-driven CO–PO mapping by Yadav et al. (2024). The strong satisfaction of employers with collaboration competencies also aligns with PBL literature emphasizing teamwork outcomes (Niu et al., 2013).

Extension to Arabic-AI contexts. The institutionalization of micro-teaching and integration of research/community engagement into ≥ 30 courses extend prior

Arabic-learning reports by coupling SCL with analytics-enabled orchestration. The emerging use of AI-supported tools (LMS-integrated, feedback automation) maps onto patterns reported by Md Yazid et al. (2024) and Al-Shaboul et al. (2025), while our emphasis on ethical, contextual adaptation addresses concerns over accuracy and equity in such systems.

Transformative lens and local values. From a TL perspective, reflective practices embedded in assessment and coursework are congruent with calls to make learning transformations visible (Searle et al., 2021), and the integration of identity (Islamic-Malay) with global competencies resonates with proposals to incorporate emotion/intuition (Mälkki & Raami, 2022) to sustain change. Compared to Indonesian OBE challenges around uneven understanding and institutional support (Mufanti et al., 2024), the present dashboard-based governance suggests a pathway to reduce fragmentation noted by Zurqoni et al. (2020).

Mechanisms of impact. The alignment chain—GLO specification → CLO scaffolding → SCL enactment → authentic assessment with calibrated rubrics—creates a coherent trajectory for students to evidence capabilities. Micro-teaching accelerates pedagogical skill transfer via coached, iterative practice; projects and cases support integration of linguistic and pedagogical knowledge; analytics shorten feedback loops by surfacing attainment patterns early. These mechanisms help explain improvements in satisfaction and employability, in line with active-learning meta-analyses (Niu et al., 2013; Spady, 1994) and OBE's theory of change (Spady, 1994).

Governance and standardization. Prior work recommends automation/standardization of OBE assessment (Lugay et al., 2020) and metricized CO-PO mapping (Yadav et al., 2024). Operationally, researchers: (a) programmatize rubrics where appropriate; (b) aggregate direct/indirect evidence in dashboards; and (c) time IQA/MRM reviews to decision windows. This reduces documentation fragmentation, strengthens external auditability, and embeds analytics into routine decision-making.

AI, equity, and ethics. Benefits of AI-supported drills and feedback are contingent on equitable access and instructor mediation. Our guardrails include human-in-the-loop validation to mitigate hallucination/bias; parity plans for low-bandwidth/offline access; and transparency about data use. These measures aim to ensure analytics and AI narrow, rather than widen, achievement gaps (Al-Shaboul et al., 2025; Yazid et al., 2024).

Measurement considerations. Researchers note two practical concerns: (1) scoring reliability and inter-rater agreement for rubric-based assessment; and (2) tracer nonresponse bias. Periodic calibration workshops and simple generalizability checks (rater × task) can sustain scoring consistency; linking dashboards to sampling frames and reminders can improve tracer representativeness and stability of employability estimates.

Generalizability and transfer. While this evaluation pertains to one institution, the routines—dashboards, alignment checks, review cadences—can travel with

contextual adjustments. Transfer depends on explicit outcome definitions, shared rubric repositories, baseline analytics capacity (even spreadsheet dashboards), and leadership sponsorship (Mufanti et al., 2024). Programs with similar identity commitments can adopt the AI-mediation stance to safeguard cultural values.

Policy and practice implications. For leaders, integrate OBE dashboards into QA portals and align budget lines with analytics-informed priorities. For faculty, embed at least one research/community-integration activity per course per semester and adopt reflective artifacts that support both TL and OBE evidence needs. For policy makers, fund communities of practice for OBE analytics and seed rubric calibration and tracer upgrades.

Future research agenda. Researchers recommend: (1) quasi-experimental evaluations of specific SCL designs on Arabic proficiency subskills; (2) studies of rubric reliability and predictive validity to graduate outcomes; (3) longitudinal tracer panels to model career trajectories; and (4) design-based research to refine AI-supported feedback workflows in Arabic tasks. These steps would strengthen causal inference and cost-effectiveness beyond this program-level appraisal.

Educational performance (high GPA, shorter time to degree, improving on-time graduation) and graduate uptake (97.5%; 4.8-month waiting time) demonstrate alignment with workforce and practice communities (schools/pesantren/language institutions). Sustained student/employer satisfaction corroborates the quality of processes and results, as well as the effectiveness of facilities and IT support.

Areas for enhancement include: (1) tightening quantification of vision-to-practice indicators across GLO–CLO–sub-outcome levels; (2) optimizing digital orchestration (outcome dashboards, academic data integration, learning analytics); (3) increasing the share of high-impact (Q1–Q2) publications and standardizing research/community integration in syllabi; and (4) sharpening alignment between community programs and the research roadmap for measurable impact.

Implications point to: (a) operationalizing indicators within outcome dashboards from GLO to CLO and sub-outcomes; (b) expanding international collaboration for co-teaching and co-publication; (c) integrating AI/digital pedagogy and Malay ethnopedagogy into Arabic language syllabi (e.g., learning analytics, adaptive assessment, locally grounded content); (d) institutionalizing a Career Center and teacher certification pathways to accelerate employability; (e) tiered targeting of research outputs (Q1–Q2 articles, textbooks, policy briefs) and a minimum standard for research/community integration (at least one course per faculty per semester).

Limitations include single-institution Self-Evaluation Report (SER) sourcing and reliance on administrative data and perception surveys, which constrain external generalizability. Future research should employ quasi-experimental or mixed-methods designs to test causal impacts of SCL-OBE on Arabic proficiency (listening, speaking, reading, writing), digital literacy, and pedagogical competence, and conduct longitudinal tracer studies to map career dynamics and upskilling needs. These syntheses inform the concluding operational recommendations.

Conclusion

Returning to the objectives, OBE-based curricular changes appear effectively operationalized across planning, process, and outcomes. The GFEM appraisal shows strong alignment between program identity (Islamic values, Malay culture, global outlook) and curriculum architecture, SCL enactment (problem-, project-, and case-based learning), authentic assessment, and facilities/IT provisioning. Educational performance (mean GPA 3.73; average time to degree 3.8 years; on-time graduation 52%), sustained student/employer satisfaction, and graduate outcomes (tracer coverage 92.86%; employability 97.5%; job waiting time 4.8 months) together indicate relevance and impact.

A supportive ecosystem—faculty-student ratio, faculty qualifications, micro-teaching and language labs, and LMS/IT infrastructure—enables SCL and holistic assessment. Integration of research and community engagement into coursework, alongside robust publication and engagement outputs, strengthens academic culture and knowledge transfer. Overall, coordinated curriculum-instruction-assessment-infrastructure contributes meaningfully to learning outcomes and graduate competitiveness.

Priority improvements remain: (1) tighter quantification of vision-to-practice indicators across GLO—CLO—sub-outcomes to enable precise monitoring; (2) deeper digital orchestration (dashboards, academic data integration, learning analytics) for evidence-informed decisions; (3) acceleration of high-impact research outputs and standardization of research/community integration in syllabi; and (4) stronger alignment between community programs and the research roadmap for measurable societal impact. Practically, this research recommends expanding international co-teaching and co-publication, embedding AI/digital pedagogy and Malay ethnopedagogy in Arabic language syllabi, institutionalizing a Career Center and teacher-certification pathways, and setting tiered targets across education-research-engagement.

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